## **Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) An actuator for actuating a brake mechanism Actuator, comprising a housing, which contains a motor and a screw mechanism that is engageable with the brake mechanism, said screw mechanism comprising a screw and a nut one of which is rotatably supported with respect to the housing, and a gear reduction mechanism connecting a rotor of the motor to at least one of the rotatable screw and the nut, said gear reduction mechanism comprising at least a concentric gear ring with radially inwardly directed teeth, an eccentrically positioned gear wheel having radially outwardly directed teeth wherein the outer diameter of the gear wheel is smaller than the inner diameter of the gear ring, such that the teeth of said gear wheel and gear ring engage each other along a part of their circumferences, and at an opposite part of their circumferences are out of engagement, said eccentric gear wheel being rotatably accommodated on an eccentrically shaped hub which is connected to the rotor of the motor, wherein the gear ring is integrated with the screw of the screw mechanism, said screw being rotatably supported with relation to the housing.
- 2. (Previously Presented) Actuator according to claim 1, wherein the rotor of the motor is rotatably supported on an outer ring of a support bearing, said outer ring being integrated with the screw and the gear ring.
- 3. (Previously Presented) Actuator according to claim 2, wherein the rotor by means of a radially inwardly extending flange is connected to the eccentrically shaped hub.
- 4. (Previously Presented) Actuator according to claim 3, wherein a positive back-drive mechanism is connected to the flange and the housing.
- 5. (Previously Presented) Actuator according to claim 4, wherein the positive back-drive mechanism is a spiral spring.

- 6. (Previously Presented) Actuator according to claim 1, wherein the eccentric gear wheel is rotatably supported with respect to the eccentrically shaped hub by means of a rolling element bearing.
- 7. (Previously Presented) Actuator according to claim 1, wherein the motor is an electric motor, the stator of which is connected to the housing.
- 8. (Previously Presented) Actuator according to claim 1, wherein the gear reduction mechanism is at the end of the screw mechanism opposite the end thereof engaging an actuating means for a brake pad.
- 9. (Previously Presented) Actuator according to claim 1, wherein the screw of the screw mechanism is rotatably supported by means of a support bearing with respect to a central support shaft, the gear ring and the gear wheel of the reduction gear mechanism surrounding said central support shaft.
- 10. (Previously Presented) Actuator according to claim 1, wherein the screw has a bore containing a lubricant reservoir.
- 11. (Previously Presented) Actuator according to claim 1, wherein the gear reduction mechanism and a positive back-drive mechanism are contained in a gear reduction module.
- 12. (Previously Presented) Actuator according to claim 1, wherein the gear reduction module comprises a central support shaft for supporting the screw mechanism.
- 13. (Currently Amended) Actuator according to claim 1, wherein the screw mechanism, a support bearing for supporting the screw mechanism, the rotor of the motor as well as a bearing (9)-for supporting the rotor on the screw mechanism are contained in a actuator module.
- 14. (Previously Presented) Actuator according to claim 1, wherein the housing, the stator and electric connections for the motor are contained in a housing module.

15. (Previously Presented) Brake caliper, comprising a claw piece with at least two brakes, and an actuator according to claim 1.